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**PATENT** 

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of: Gil et al.

Art Unit: 3627

Application No. 10/027,965 (Conf. No. 1405)

Examiner: Steven B. McAllister

Filed: December 19, 2001

For: REPORTING IN A SUPPLY CHAIN

# TRANSMITTAL OF APPELLANT'S REVISED APPEAL BRIEF

Mail Stop Appeal Brief - Patents Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

Dear Sir:

In accordance with 37 CFR 41.37, Appellant hereby submits a revised Appeal Brief.

An Appeal Brief in this matter was submitted previously on January 25, 2007, and was accompanied by a \$500 appeal brief filing fee. That Appeal Brief was rejected as non-compliant in a Notification mailed out on April 18, 2007.

Applicants petition for a four-month extension of time under 37 CFR 1.136, the fee for which is \$1590. .

If any additional fee is required in connection with this communication, charge Deposit Account No. 503286 of Perry Hoffman & Associates, P.C.

Date: September 7, 2007

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#### APPELLANTS' REVISED APPEAL BRIEF

Mail Stop Appeal Brief - Patents Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

Dear Sir:

In support of the appeal from the final rejection dated June 2, 2006, Appellants now submit their Appeal Brief, revised as required by the Office Letter mailed on 04/18/2007.

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## I. Real Party in Interest

The patent application that is the subject of this appeal is assigned to Illinois Tool Works, Inc.

## II. Related Appeals and Interferences

There are no appeals or interferences that are related to this appeal.

#### III. Status of Claims

The application, as filed, included 26 claims. Of these, claims 1-6, 13-17, and 23-26 have been withdrawn.

Claims 7-12 and 18-22 have been rejected. No claims have been allowed. Applicants appeal the rejection of claims 7-12 and 18-22.

#### IV. Status of Amendments

No amendments have been entered subsequent to the Final Rejection mailed on June 2, 2006. Accordingly, the Claim Appendix reflects the claims as of that date.

#### V. Summary of the Claimed Subject Matter

In the discussion which follows, the actual language of the claims is set forth in **bold** text. Reference symbols, citations to the specification, and explanations are set forth in non-bold text.

7. An automated method for reporting in a supply chain (10 in Figures 1 and 6) involving an enterprise (16 in Figure 1, "OEM" in Figure 4) and at least one partner (18 in Figures 1 and 6, "3PL" in Figure 4), the method comprising:

Figure 1 illustrates a supply chain system 10 in which an enterprise domain 16 is linked by a network domain 14 to multiple partner domains 18 and customer domains 20. Figure 4

presents a specific example of a transaction where an original equipment manufacturing enterprise "OEM" is linked by a network domain 14 to a third party logistics partner "3PL" and also to a specific customer 48. (The reference symbols "OEM" and "3PL" actually appear in Figure 4, so corresponding reference numbers are omitted from this brief for clarity.)

sending a request (94 in Figure 4) for real-time data (98 in Figure 4) from a network system (14 in Figures 1, 4, 6) to a partner coordinator component (180 in Figure 6 – see below) integrated with an existing partner system (18 in Figures 1 and 6, "3PL" in Figure 4), the real-time data (98 in Figure 4) relating to a transaction (defined by communications 82, 90, 92, 94, 96, 98, 100, and 108 or 110 in Figure 4 – see explanation below) in which the partner (18 in Figure 1 and 6, "3PL" in Figure 4) is involved, the network system (14 in Figures 1, 4, 6) maintaining a context (136 in Figure 5) for the transaction (defined by communications 82 to 110 shown in Figure 4 – see explanation presented below);

Figure 6 illustrates how a "partner coordinator component 180" reformats and transfers transaction-related messages between customer and partner enterprise resource planning (ERP) applications and systems 182 and 198 and the network domain 14. The "partner coordinator component 180" is described in the specification, page 23, lines 9-19, as follows:

... [O]ne or more partner coordinator components 180 [Figure 6] may be provided at customer domain 20, partner domain 18. ... [T]he partner coordinator component 180 provides the network domain 14 with real-time information about transactions that are occurring within the supply chain. This real-time information can be used to generate, assemble, modify, update, etc., respective contexts for the transactions. The partner coordinator may independently "push" out the real-time data to the network domain 14 or may provide access to the data for the network domain by cooperating with one or more existing (or legacy[)] systems ... at the customer domain 20 or partner domain 18.

The "transaction" is defined by the series of communications, beginning with 82 (customer service request) and continuing on with the communications 90 (enter service order) 92 (real-time inventory check), 94 (real-time ship request), 96 (real-time inventory updates), 98 (service order proof of delivery), and 100 (close service order) and also 108 (ship part) or 110 (dispatch field technician). These communications, taken together, define an illustrative

transaction carried out for the customer 48 by the OEM, the network domain 14, and the partner 3PL.

The specification, page 17, lines 13-20 begins describing this illustrative "transaction" as follows:

Figure 4 illustrates a number of different actions which may occur in a supply chain and some of the features of a network domain 14 .... A customer 48 may make a service request 82 to an OEM ... which can be an enterprise ... [16]. The OEM ... may enter a service order 90 to a network domain 14. One or more real-time inventory checks 92 may occur between the network domain 14 and the OEM .... The network domain 14 may make a real-time ship request 94 to a third party logistics (3PL) provider ..., which can be a partner to the OEM .... The 3PL ... may provide real-time inventory updates 96. ... [This quote from the specification continues below.]

The "context for the transaction" is maintained in a data access layer component 136, shown in Figure 5, as the specification indicates on page 22, lines 7-10:

The data access layer component 136 provides access for other components of the network domain 14 to databases, such as a lightweight directory access protocol (LDAP) database 162 or a relational database (labeled "Oracle" in Fig. 5) 164. The databases may store real-time data relating to one or more transactions and may maintain a respective *context for each transaction*. [Emphases added.]

receiving at the network system (14 in Figures 1, 4, and 6) the real-time data (98 in Figure 4) from the existing partner system (18 in Figure 1 and 6, "3PL" in Figure 4) in response to the request (94 in Figure 4); and

The specification, page 17, lines 20-22 continues describing the illustrative "transaction" as follows:

... The 3PL may ship a part 108 or dispatch a field technician 110 to the customer 48. When the service is complete, the 3PL may provide service order proof of delivery status 98 to the network domain 14, [This quote from the specification continues below.]

generating a real-time report (100 in Figure 4) using the real-time data (98 in Figure 4) for updating the enterprise (16 in Figure 1, "OEM" in Figure 4) on the transaction (defined by communications 82 to 110 in Figure 4 – see explanation above) in which the partner (18 in Figure 1 and 6, "3PL" in Figure

4) is involved, thereby providing real-time visibility (370 in Figure 15) into a status of the partner (18 in Figure 1 and 6, "3PL" in Figure 4) with respect to the transaction (defined by communications 82 to 110 in Figure 4 – see explanation above).

The specification, page 17, lines 22-23 concludes describing the illustrative "transaction" as follows:

... and the network domain 14 may close the service order 100 with the OEM ....

The specification, page 43, lines 9-14 and page 44, lines 22-27, describes the "real-time visibility" of the "transaction" as follows, with reference to Figure 15:

The graphical user interface 370 may provide an enterprise and its partners with dynamic, consistent context-based information to be shared, updated, and acted upon according to stringent policy-based application and business rules set up by key performance indicators. This allows for a uniform view of the information whether the information originated in an enterprise application or a partner application across the entire supply chain network. ...

The graphical user interface 370 provides a personalized control center for visibility and control into a supply chain ... [and] is fully customizable with the drill-down capabilities to view more specific information. With the graphical user interface 370, an enterprise understands the extended supply chain of itself and its partners and end-customers, thereby providing the ability to respond rapidly and efficiently to enhance customer satisfaction while reducing operating costs.

10. The method of claim 7, further comprising converting (a step performed by an adaptation component 260, Figure 11, that lies within the partner coordinating component 180, Figure 11) the real-time data into a format usable by the network system (14).

Figures 1 and 6 illustrate that a supply chain management network (10 in Figures 1 and 6) is formed by using a centralized Network Domain (14 in Figures 1 and 6) to interconnect an Enterprise Domain (16 in figure 1) with proprietary enterprise resource planning (ERP) applications (182 and 196 in Figure 6) that are found within Partner Domains (18 in Figures 1 and 6) and Customer Domains (20 in Figures 1 and 6).

The proprietary enterprise resource planning (ERP) applications (182 and 196 in Figure 6) and other similar applications found within each partner (18 in Figures 1 and 6) and customer (20 in Figures 1 and 6) utilize their own proprietary transaction data formats, and these formats are not understandable to the applications within the Network Domain (14 in Figures 1 and 6). For example, the Specification says on page 14, lines 8-19:

The network 10 allows for a non-intrusive business-to-business (B2B) integration. The network 10 offers partners multiple connection options to minimize IT investment, reduce overhead, and increase adoption rates among partners. The noninvasive system components do not replace the infrastructure of an enterprise or a network, but instead integrate seamlessly with and enhance the existing infrastructure of an enterprise or a partner. The network 10 can support direct, real-time connections to a number of enterprise resource planning (ERP), material requirements planning (MRP), supply chain management (SCM), customer relationship management (CRM), warehouse management systems (WMS), and enterprise application integration (EAI) applications or subsystems for direct back-end system integration. Furthermore, the network can support connections to databases, spreadsheets, and other software systems used to manage supply chain operations.

A Partner Coordinator (180 in Figure 6 and 11) connects the ERAs, etc. (182 and 198 in Figure 6) within each Partner and Customer Domain (18 and 20 in Figures 1 and 6) to the Network Domain (14 in Figures 1 and 6). To make it possible for all of these diverse applications and systems to "understand" each other, the Partner Coordinator (180 in Figures 6 and 11) includes an Adaptation component (260 in Figure 11), which performs the new step introduced by Claim 10. This new step is described in the specification (page 32, line 32 to page 33, line 3):

Adaptation component 260 [Figure 11] may convert or adapt the data and information between a format that is usable and understood by the existing partner [and customer] applications and a format that is usable and understood by the components and applications in the network domain 14 [Figures 1 and 6].

This new step introduced by claim 10 is thus a step that reformats the real-time data so that all of the diverse customer and partner applications (ERP, MRP, SCM, CRM, WMS, EAI, etc. listed above) are integrated seamlessly into a global supply chain system.

18. A system for reporting in a supply chain (10 in Figures 1 and 6) involving an enterprise (16 in Figure 1, "OEM" in Figure 4) and at least one partner (18 in Figures 1 and 6, "3PL" in Figure 4), the system comprising:

Figure 1 illustrates a supply chain system 10 in which an enterprise domain 16 is linked by a network domain 14 to multiple partner domains 18 and customer domains 20. Figure 4 presents a specific example of a transaction where an original equipment manufacturing enterprise "OEM" is linked by a network domain 14 to a third party logistics partner "3PL" and also to a specific customer 48. (The reference symbols "OEM" and "3PL" actually appear in Figure 4, so corresponding reference numbers are omitted from this brief for clarity.)

a database (136 in Figure 5) operable to maintain a context for a transaction in which the partner (18 in Figures 1 and 6, "3PL" in Figure 4) is involved;

In the specification, the "database" is referred to as the "data access layer component 136" of the "network domain 14," and appears in Figure 5. The specification describes the component 136 as follows (page 22, lines 8 to 12):

The data access layer component 136 provides access for other components of the network domain 14 to databases, such as a lightweight directory access protocol (LDAP) database 162 or a relational database (labeled "Oracle" in Fig. 5) 164. *The databases may store real-time data relating to one or more transactions and may maintain a respective context for each transaction*. The use of the LDAP 162 provides for the distribution of key information throughout the [supply chain] network 10 for access by network system components. ... [Emphasis added.]

### a processor (132) coupled to the database, the processor operable to:

The "processor" also appears in Figure 5, where it is referred to as the "process execution component 132." This component includes software that carries out business workflow 140, exception workflow 142, and routing workflow 144. These workflows include processes which execute tasks. The workflows 140, 142, and 144 are initiated by transactions, requests, and demands. The workflows 140, 142, and 144 can access real-time data relevant to a transaction and can obtain such data from a partner system 18 or from the "database," the data access layer component 136. The workflows 140, 142, and 144 are assisted by a "business data managers

component 134" which maintains, among other things, the policies and practices specific to an enterprise's 16 way of doing business with a partner 18. (See specification, page 21, lines 6-30.)

send a request (94 in Figure 4) to a partner coordinator component (180 in Figure 6 – see below) integrated with an existing partner system (18 in Figures 1 and 6, 3PL in Figure 4) for access to real-time data (98 in Figure 4) relating to a transaction (defined by communications 82, 90, 92, 94, 96, 98, 100, and 108 or 110 shown in Figure 4 – see explanation presented below) in which the partner (18 in Figures 1 and 6, 3PL in Figure 4) is involved;

Figure 6 illustrates how a "partner coordinator component 180" reformats and transfers transaction-related messages between customer and partner enterprise resource planning (ERP) applications and systems 182 and 198 and the network domain 14. The "partner coordinator component 180" is described in the specification, page 23, lines 9-19, as follows:

... [O]ne or more partner coordinator components 180 [Figure 6] may be provided at customer domain 20, partner domain 18. ... [T]he partner coordinator component 180 provides the network domain 14 with real-time information about transactions that are occurring within the supply chain. This real-time information can be used to generate, assemble, modify, update, etc., respective contexts for the transactions. The partner coordinator may independently "push" out the real-time data to the network domain 14 or may provide access to the data for the network domain by cooperating with one or more existing (or legacy[)] systems ... at the customer domain 20 or partner domain 18.

The "transaction" is defined by the series of communications, beginning with 82 (customer service request) and continuing on with the communications 90 (enter service order) 92 (real-time inventory check), 94 (real-time ship request), 96 (real-time inventory updates), 98 (service order proof of delivery), and 100 (close service order) and also 108 (ship part) or 110 (dispatch field technician). These communications, taken together, define an illustrative transaction carried out for the customer 48 by the OEM, the network domain 14, and the partner 3PL.

The specification, page 17, lines 13-20 begins describing this illustrative "transaction" as follows:

Figure 4 illustrates a number of different actions which may occur in a supply chain and some of the features of a network domain 14 .... A customer 48 may make a service request 82 to an OEM ... which can be an enterprise ... [16]. The OEM ... may enter a service order 90 to a network domain 14. One or more real-time inventory checks 92 may occur between the network domain 14 and the OEM .... The network domain 14 may make a real-time ship request 94 to a third party logistics (3PL) provider ..., which can be a partner to the OEM .... The 3PL ... may provide real-time inventory updates 96. ... [This quote from the specification continues below.]

receive the real-time data (98 in Figure 4) from the existing partner system (18 in Figures 1 and 6, "3PL" in Figure 4) in response to the request (94 in Figure 4); and

The specification, page 17, lines 20-22 continues describing the illustrative "transaction" as follows:

... The 3PL may ship a part 108 or dispatch a field technician 110 to the customer 48. When the service is complete, the 3PL may provide service order proof of delivery status 98 to the network domain 14... [This quote from the specification continues below.]

generate a real-time report (100 in Figure 4) using the real-time data (98 in Figure 4) for updating the enterprise (16 in Figure 1, "OEM" in Figure 4) on the transaction (defined by the communications 82 to 110 in Figure 4 – see the explanation above) in which the partner (18 in Figures 1 and 6, "3PL" in Figure 4) is involved, thereby providing real-time visibility into a status of the partner (18 in Figures 1 and 6, "3PL" in Figure 4) with respect to the transaction (defined by the communications 82 to 110 in Figure 4 – see the explanation above).

The specification, page 17, lines 22-23 concludes describing the illustrative "transaction" as follows:

... and the network domain 14 may close the service order 100 with the OEM ....

The specification, page 43, lines 9-14 and page 44, lines 22-27, describes the "real-time visibility" of the "transaction" as follows, with reference to Figure 15:

The graphical user interface 370 may provide an enterprise and its partners with dynamic, consistent context-based information to be shared, updated, and acted upon according to stringent policy-based application and business rules set up by key performance indicators. This allows for a uniform view of the information whether the information originated in an enterprise application or a partner application across the entire supply chain network. ...

The graphical user interface 370 provides a personalized control center for visibility and control into a supply chain ... [and] is fully customizable with the drill-down capabilities to view more specific information. With the graphical user interface 370, an enterprise understands the extended supply chain of itself and its partners and end-customers, thereby providing the ability to respond rapidly and efficiently to enhance customer satisfaction while reducing operating costs.

#### VI. Grounds of Rejection to be Reviewed on Appeal

Claims 7-12 and 18-22 stand rejected under 35 U.S.C. §102(b) as being anticipated by Mowery, *et al* (U.S. Patent no. 5,983,198).

Claims 10 and 11 stand rejected under 35 U.S.C. §103(a) as being obvious in view of Mowery, *et al*.

Applicants traverse these rejections.

#### VII. Argument

The claims have been grouped into two groups to facilitate this appeal.

In Section A below, all of the claims are grouped together. Applicants suggest independent claim 7, a method claim, to be a representative claim. Independent claim 18 is similar to claim 7 in scope and in inventive spirit, but is formulated as an apparatus claim. The remaining claims 8-12 and 19-22 are all dependent upon these two claims.

In Section B, which follows Section A, the two dependent claims 10 and 11 are grouped together for argument purposes, and applicants suggest claim 10 to be a representative claim. Dependent claim 10 is dependent upon independent claim 7, and claim 11 in its turn is dependent upon claim 10.

The patentability of claims 8-9, 11, and 18-22 are not argued separately in this appeal.

### A. Rejection of Claims 7-12 and 18-22 as Anticipated Under 35 U.S.C. 102(e)

1. The transaction oriented methods and systems of the invention as claimed, involving communications concerning commercial transactions between an enterprise and its trading partners, are patentable over the non-transaction oriented inventory management system of Mowery, et al.

#### The Examiner asserts that:

Mowery shows sending a request from a network for real time data comprising, for instance, [the] inventory level of a partner; receiving the real-time data from the partner; and generating a real-time report using the data providing visibility into the status of the partner. (Final Rejection mailed 06/02/2006, page 2, lines 11-14)

Respectfully, Mowery, *et al.* do not disclose anything about transaction oriented methods and systems that involve real-time data relating to <u>supply chain transactions</u> in which <u>an enterprise</u> and <u>at least one of its business partners</u> are involved, as recited in the claims on appeal.

The reference relied upon by the Examiner shows a system directed toward maintaining the level of a liquid commodity on a customer site by directly monitoring the customer's tanks, telemetering how full and how hot the tanks are to a central station, reviewing past usage patterns of the customer, and then scheduling fuel deliveries accordingly. (Col. 3, lines 36-44.) More specifically, level sensors 108 and temperature sensors 110 are installed on tanks 104 at customers' plants 102. (Col. 3, lines 51-58.) Temperature and level signals generated by these sensors are broadcast by remote telemetry units 112 to a central station 114. (Col. 3, lines 58-65.) The telemetry data is processed at the central station 114 by information systems that store, analyze and report inventory and usage patterns. (Col. 4, lines 13-16.) Material consumption at each plant 102 is predicted based on each particular plant's historical consumption pattern and available information on future changes. Then and product delivery is optimally scheduled by the central station 114 such that the delivery of raw materials to the tanks 104 is customized to fit the particular needs of the particular plant 102. (Col. 4, lines 18-24.) The reference relied upon is thus directed toward maintaining an inventory of a liquid commodity at plant sites and does not appear to contain any disclosure related to the management of complex transactions between an enterprise and its trading partners.

In contrast to this, the present invention is directed toward <u>supply chain transaction</u> oriented methods and systems involving an <u>enterprise</u> and at least one of its <u>trading partners</u>. Claim 7 recites "sending a request for real-time data from a network system to a <u>partner coordinator component</u> integrated with an <u>existing partner system</u>, the real-time data relating to <u>a transaction</u> in which the <u>partner</u> is involved" and "generating a real-time report using the real-time data for updating the <u>enterprise</u> on <u>the transaction</u> in which the <u>partner</u> is involved". (Emphasis added.) Claim 18 recites "a database operable to maintain a context for a <u>transaction</u> in which the <u>partner</u> is involved" and a processor operable to "send a request to a <u>partner coordinator component</u> integrated with an <u>existing partner system</u> for access to real-time data relating to <u>a transaction</u> in which the <u>partner is involved</u>" and "generate a real-time report using the real-time data for updating the <u>enterprise</u> on <u>the transaction</u> in which the <u>partner</u> is involved". (Emphasis added.)

The claims require the <u>transactions</u> to be carried out between an <u>enterprise</u> and its <u>partner</u>. Additionally, the <u>existing computer systems</u> of the <u>partner</u> must be modified by the addition to them of a <u>partner coordinator component</u> 180. This <u>partner coordinator component</u> 180 then enables the <u>existing partner systems</u> to respond to requests for real-time data that are generated by the <u>enterprise</u> and by its centralized network domain processes. None of this is taught in the Mowery, *et al.* patent cited by the Examiner.

The specification gives as examples of transaction data "numbers for purchase orders, shipping receipts, [and] invoices for various transactions in which the respective partner is involved." (Page 18, lines 17-19.) The specification describes a "workflow" that "may be initiated by a transaction, a request, or a demand. ..." [T]he workflows "may access real-time data relevant to a transaction from an existing partner system ... and process a request for a transaction in the context [of] ... the transaction." (Page 21, lines 9-13, emphasis added.) At page 22, lines 7-11, the specification describes a database that stores real-time data relating to transactions. Figure 4 and page 17, lines 13-24 of the specification present an illustrative scenario of how a particular transaction might flow through the network 10. The present invention is thus directed toward methods and systems for accomplishing and reporting the transactions that occur in a supply chain involving an enterprise and at least one partner.

The "partner coordinator component 180" is described in the specification, page 23, lines 9-19, as follows:

... [O]ne or more partner coordinator components 180 [Figure 6] may be provided at customer domain 20, partner domain 18. ... [T]he partner coordinator component 180 provides the network domain 14 with real-time information about transactions that are occurring within the supply chain. This real-time information can be used to generate, assemble, modify, update, etc., respective contexts for the transactions. The partner coordinator may independently "push" out the real-time data to the network domain 14 or may provide access to the data for the network domain by cooperating with one or more existing (or legacy[)] systems ... at the customer domain 20 or partner domain 18.

The claims require the partner coordinator component 180 to be integrated into, and thereafter to provide connectivity to a wide range of <u>existing partner systems</u> at the site of a supply chain partner. The following passage from the specification indicates the wide range of <u>existing partner systems</u> that the partner coordinator component 180 can be integrated into:

The network 10 allows for a non-intrusive business-to-business (B2B) integration. The network 10 offers partners multiple connection options to minimize IT investment, reduce overhead, and increase adoption rates among partners. The noninvasive system components do not replace the infrastructure of an enterprise or a network, but instead integrate seamlessly with and enhance the existing infrastructure of an enterprise or a partner. The network 10 can support direct, real-time connections to a number of enterprise resource planning (ERP), material requirements planning (MRP), supply chain management (SCM), customer relationship management (CRM), warehouse management systems (WMS), and enterprise application integration (EAI) applications or subsystems for direct back-end system integration. Furthermore, the network can support

connections to databases, spreadsheets, and other software systems used to manage supply chain operations.

There is no disclosure at all in the Mowery, *et al.* patent about partner coordinator systems, much less about them being integrated into diverse existing proprietary partner systems.

#### 2. The Examiner has given the term 'transaction' an unreasonably broad interpretation.

The Examiner further says, in the Final Office Action mailed June 2, 2006 (page 4, line 13 to page 5, line 4):

[T]he meaning of transaction is not limited to a financial or commercial transaction between two parties. It can refer to a transaction within a group... and it can refer to non-financial transactions. ...

[E]ven if it is assumed that the transaction must be a financial one between the customer (the partner) and another party (the vendor delivering the resource to the customer – the enterprise), the requests for data are for data relating to a transaction. They are for inventory levels at the customer, and those inventory levels are related to the transaction because upon reaching a certain inventory level the enterprise delivers and sells more product to the customer. The reports are likewise related to the transaction.

Applicants respectfully submit that the Examiner's construction is unreasonably broad.

Claims are not to be read in a vacuum, and limitations therein are to be interpreted in light of the specification in giving them their 'broadest reasonable interpretation'", *In re Marosi*, 710 F.2d 799, 802, 218 USPQ 289, 292 (Fed. Cir. 1983).

The Examiner's construction of the term transaction appears to be unreasonably broad in view of the specification and confuses a transaction with its component tasks, events or other actions.

The specification makes clear that the transactions at issue relate to a business context. (Page 16, lines 2-20.) Examples of the types of transactions contemplated include a purchase order, a service request, an installation request, a warranty matter, or a replacement request. (Page 16, lines 6-7.) The specification also distinguishes between a transaction and the tasks, events or other action in the supply chain related to the transaction. (See page 16, lines 12-16; page 17, lines 29-32; and page 18, lines 17-24.) The Examiner's equating a transaction with the tasks, events or other individual actions within a supply chain that are related to or that form elements of that transaction is unreasonably broad in light of the specification.

# 3. The reference relied upon does not disclose each and every limitation of the claimed invention.

The Examiner fails to point out where Mowery *et al.* disclose certain elements of the claimed method and system for reporting. The claimed system and method include "a <u>partner coordinator component integrated with an existing partner system</u>" and also require "<u>providing real-time visibility into a status of the partner with respect to the transaction</u>." The Mowery *et al.* patent does not mention any <u>partner coordinator component</u> at all; much less does it disclose <u>integrating</u> such a component into some <u>existing system of a "partner"</u> in the supply chain. The Mowery *et al.* patent also never mentions "partners" at all – the patent only speaks of "customers." In the specification, a "customer" is an end-user, such as a consumer. (Page 16, line 7-10.) In Figure 1, there are both customer domains 20 and partner domains 18. The Mowery *et al.* patent discloses the provision of a central station 114, operated by a material supplier, for controlling the delivery of a material directly to its <u>customers</u>, not to any <u>partner</u>, and not with the assistance or cooperation of any partner. The Examiner points to no actual third party partner involvement in the Mowery, *et al.* patent. There is also no disclosure in the Mowery *et al.* patent that the "status" of "the partner with respect to a transaction" is to be made "visible" in "real-time," as all of the claims require.

Because the Examiner has failed to point out where each and every limitation of the claims is disclosed in the prior art, applicants respectfully submit that the claim rejections are improper.

#### B. Rejection of Claims 10 and 11 under 35 U.S.C. 102(b) and 35 U.S.C. 103(a)

Dependent claim 10 adds to independent claim 7 one additional element: the step of "converting the real-time data into a format usable by the network system."

This conversion is performed by an adaptation component (260 in Figure 11) part of a partner coordinator (180 in Figures 6 and 11), which, in response to requests for real-time data, accepts or fetches proprietary transaction data from proprietary systems found within the domain of each partner or customer (18 and 20 in Figure 6), transforms the proprietary transaction data into a standardized format, and then sends the transaction data across a network (12 in Figure 1) to a central network domain (14 in Figures 1 and 6). As to this, the specification (page 32, line 32 to page 33, line 3) says:

Adaptation component 260 may convert or adapt the data and information between a format that is usable and understood by the existing partner [and customer] applications and a format that is usable and understood by the components and applications in the network domain 14.

The Examiner has rejected this claim twice: first under 35 U.S.C. 102(b) "as anticipated by ... Mowery" and secondly under 35 U.S.C. 103(a) "as obvious over Mowery." This dual rejection is mutually inconsistent with itself, and accordingly it is not legally sound. It must be reversed.

With respect to the Examiner's rejection of claim 10 under 102(b), the Examiner admits, in his alternative rejection of claim 10 under 103(a), that an entirely new element (or step) of the invention is introduced by claim 10 – an element that is not disclosed in Mowery, *et al*. The Examiner says: "

Mowery shows all elements [of claim 10] except converting the data into data usable by the network. (Final Rejection mailed 04/18/2007, page 3, lines 20-21)

The Examiner thus admits that the new element (or step) added by claim 10, the step of "converting the real-time data into a format usable by the network system," is entirely missing from Mowery, *et al.* Mowery, *et al.* discloses only a closed, proprietary system whose proprietary transaction data never needs to be reformatted into a standardized format so that it can be stored centrally and then shared over a network with an enterprise other systems of partners and customers that have their own proprietary data formats.

But if Mowery, *et al.* does not disclose the new element (or step) defined by claim 10, then Mowery, *et al.* does not "anticipate" claim 10 under 102(b). As Robert Harmon says in his treatise on Federal Circuit patent law:

Under modern decisions, anticipation requires that each and every element of the claimed invention be disclosed in a single prior art reference ..." Robert L. Harmon, PATENTS AND THE FEDERAL CIRCUIT, page 90 (6<sup>th</sup> Ed. BNA 2003).

Accordingly, the Examiner's rejection of claim 10 as unpatentable under 35 U.S.C. 102(e) is unsound and must be reversed, since the Mowery, *et al.* patent fails to disclose an element of the invention defined by the combination of claims 7 and 10. (And, of course, Mowery, *et al.* also fails to disclose additional elements of claim 7, as was explained above.)

With respect to the Examiner's alternative rejection of claims 10 under 103(a), after admitting that Mowery, *et al.* does not disclose the step of "converting the data into data usable by the network," the Examiner fails to cite a second reference which does disclose this element of the combination. The Examiner thus relies only upon Mowery, *et al.* in support of his obviousness rejection of these two claims. The Examiner says:

Mowery shows all elements except converting the data into data usable by the network. However, to convert data from an outside system to data usable by another system is notoriously old and well known in the art. It would have been obvious to one of ordinary skill in the art to do so in order to allow the system to successfully use the information. ((Final Rejection mailed 04/18/2007, page 3, line 20 to page 4, line 2)

The Examiner should have cited a second reference – say a patent or an article – that disclosed the added step introduced by claim 10 of converting the proprietary data of a partner or customer into "a format usable by the network system." Then applicants could have studied both references and then determined, for example, whether the second reference was rationally combinable with Mowery, *et al.*, or whether the second reference was entirely unrelated and irrelevant to Mowery, *et al.* (Or perhaps Applicants would have agreed with the Examiner.)

By not citing any second reference at all, and by relying instead upon the fact that the step introduced by claim 10 which does not appear in Mowery, *et al.* is "notoriously old and well known in the art," the Examiner has failed to establish a *prima facie* case of obviousness. To quote the Manual for Patent Examining Procedure:

To establish a *prima facie* case of obviousness, three basic criteria must be met: ... Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination ... must ... be found in the prior art .... (Emphasis added – MPEP, §706.02(j), page 700-48, Rev. 5, Aug. 2006)

Since the Examiner has failed to establish a *prima facie* case of obviousness, the rejection is improper as a matter of law; and applicants do not need to respond to this incomplete and improper rejection.

Without conceding this point, an evaluation of the Mowery, *et al.* patent further reveals that it does not render the present invention as claimed in claims 7 and 10 obvious. The Mowery, *et al.* patent discloses a proprietary inventory monitoring and liquid material delivery system, shown in Figure 1. It is not a supply side computer network, interchanging purchase and sale orders, inventory information, and the like among different trading partners and customers

having incompatible computer systems, unlike the invention defined by claims 7 and 10. In Figure 1 of the Mowery, *et al.* patent, several tanks 104 located at a plant 192 are each monitored by ultrasonic liquid level sensors 108 "manufactured by Electronic Sensors, Inc." (Mowery, *et al.*, Col.3, lines 51-54) and by thermocouple temperature sensors 110. (Col. 3, lines 54-58) Signals from these level sensors 108 and thermocouple temperature sensors 110 "are provided to a remote telemetry unit (RTU) 112 which is programmed to communicate information to a central station 114 via standard voice telephone lines ...." (Col. 3, lines 54-63) The central station then sends out "a fleet of vehicles 118" to deliver "the various products to the tanks." (Col. 4, lines 26-28) Invoices and usage information are then sent to customers 126. (Col. 5, lines 2-5)

Since the level sensors 108 all come from one supplier and are thus presumably identical as to the signals they generate, and since the thermocouples 110 are, by their very nature, also identical as to the signals they generate, there is absolutely no reason in Mowery, *et al.* for "converting the real-time data into a format usable by" the central station 114 before the data is sent to that central station 114, as claim 10 requires. No mechanism for performing such a conversion is disclosed. Likewise, the invoices sent to customers are presumably human intelligible and also require no "converting" into some standardized format. Hence, the Mowery, *et al.* patent does not disclose any "converting ... data into a format" step, and by its very nature, the Mowery, *et al.* system does not require such a step. Thus, the Mowery, *et al.* patent does not render the invention, as claimed by claims 7 and 10, obvious to one skilled in the art.

The present invention teaches interfacing the supply chain system to many different customer and partner-supplier software systems, all of which have their own proprietary ways of formatting their data. For example, the specification, page 14, lines 8–19 says:

The network 10 allows for a non-intrusive business-to-business (B2B) integration. The network 10 offers partners multiple connection options to minimize IT investment, reduce overhead, and increase adoption rates among partners. The noninvasive system components do not replace the infrastructure of an enterprise or a network, but instead integrate seamlessly with and enhance the existing infrastructure of an enterprise or a partner. The network 10 can support direct, real-time connections to a number of enterprise resource planning (ERP), material requirements planning (MRP), supply chain management (SCM), customer relationship management (CRM), warehouse management systems (WMS), and enterprise application integration (EAI) applications or subsystems for direct back-end system integration. Furthermore, the network can support

connections to databases, spreadsheets, and other software systems used to manage supply chain operations.

To make it possible for all of these diverse applications and systems to "understand" each other, a Partner Coordinator (180 in Figures 6 and 11) is integrated into each of these proprietary systems. And to reformat the data produced by these proprietary systems into a format intelligible to the remainder of the supply chain system 10, each Partner Coordinator includes an Adaptation component (260 in Figure 11), which performs the new reformatting step that is introduced by Claim 10. This new reformatting step is described in the specification (page 32, line 32 to page 33, line 3):

Adaptation component 260 [Figure 11] may convert or adapt the data and information between a format that is usable and understood by the existing partner [and customer] applications and a format that is usable and understood by the components and applications in the network domain 14 [Figures 1 and 6].

Claim 10 is directed to the inclusion of this adaptation component 260 (Figure 11) with the other elements of claim 7 so that the modified proprietary partner systems are capable of "converting the real-time data into a format usable by the network system." (Claim 10) No such component can be found in the Mowery, *et al.* patent; and accordingly, claims 10 and 7 together define invention over the art of record.

#### C. Conclusion

Nothing in Mowery, *et al.* appears to disclose the transaction-oriented methods and systems of the invention as claimed for enabling an enterprise and its partners to perform transactions. Nothing in Mowery, *et al.* appears to disclose integrating a partner coordinator component into existing proprietary partner computer systems to couple them into an enterprise supply chain network having other partners. And (with respect to dependent claim 10), nothing in Mowery, *et al.* appears to disclose including in such a partner coordinator an adaptation component that can reformat proprietary customer data to make the data understandable to other components of such a supply chain.

Applicants respectfully submit that the pending claims are patentable over the reference relied upon by the Examiner. For the reasons given above, the present invention is considered to be in proper condition for allowance and action to that end is respectfully requested.

Old Attorney Dkt. No. M-11872US New Attorney Dkt. No. 21-015 ITW 20552

Respectfully submitted,

Date: September 11, 2007

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#### VIII. CLAIMS APPENDIX

### 1-6. (Withdrawn)

7. (Original) An automated method for reporting in a supply chain involving an enterprise and at least one partner, the method comprising:

sending a request for real-time data from a network system to a partner coordinator component integrated with an existing partner system, the real-time data relating to a transaction in which the partner is involved, the network system maintaining a context for the transaction;

receiving at the network system real-time data from the existing partner system in response to the request; and

generating a real-time report using the real-time data for updating the enterprise on the transaction in which the partner is involved, thereby providing real-time visibility into a status of the partner with respect to the transaction.

- 8. (Original) The method of claim 7, wherein the real-time data comprises transaction data involving a status of the transaction.
- 9. (Original) The method of claim 7, wherein the real-time data comprises reference data related to the partner.

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- 10. (Original) The method of claim 7, further comprising converting the real-time data into a format usable by the network system.
- 11. (Original) The method of claim 10, wherein converting comprises formatting the real-time data into extensible markup language (XML) format.
- 12. (Original) The method of claim 7, further comprising validating the realtime data against the context maintained for the transaction.

#### 13-17. (Withdrawn)

- 18. (Original) A system for reporting in a supply chain involving an enterprise and at least one partner, the system comprising:
- a database operable to maintain a context for a transaction in which the partner is involved; and

a processor coupled to the database, the processor operable to:

send a request to a partner coordinator component integrated with an existing partner system for access to real-time data relating to a transaction in which the partner is involved;

receive the real-time data from the existing partner system in response to the request; and

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generate a real-time report using the real-time data for updating the

enterprise on the transaction in which the partner is involved, thereby providing real-time

visibility into a status of the partner with respect to the transaction.

19. (Original) The system of claim 18, wherein the processor is operable to

generate a graphical user interface for presenting the report.

20. (Original) The system of claim 19, wherein the report compromises an

alert report to notify the partner of the status of the transaction.

21. (Original) The system of claim 19, wherein the report comprises a task

report to notify the partner of a task relating to the transaction to be performed.

22. (Original) The system of claim 19, wherein the report comprises an

inventory report to update the enterprise or the partner of an inventory level relating to the

transaction.

23-26. (Withdrawn)

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# IX. EVIDENCE APPENDIX

None.

# X. RELATED PROCEEDINGS APPENDIX

None.